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ABSTRACT

African American communities are disproportionately subjected to large amounts of environmental pollution and environmental hazards. However, little is known about their environmental concerns, understandings, and values. In the study reported in this paper, 24 African American parents from Houston, Texas were interviewed on their perspectives about nature and environmental education. Results showed that animals, plants, and parks played an important part in the lives of these parents and their families. Parents were also aware of the negative effects of environmental problems such as air pollution, water pollution, and garbage. Parents talked about such problems with their children, acted to help the environment, and believed it was important to live in harmony with nature. Five categories emerged which characterized parents' conceptions of what it means to live in harmony with nature, including living in balance with nature and respecting nature. Parents supported environmental education for their children and believed it was as important as drug education. Taken as a whole, parents spoke of their commitment to environmental issues and enjoyment of nature while remaining vividly aware of the difficulties which arise from urban poverty. Contains 39 references. (Author/JRH)

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"Who'd Want to Walk around Smelling Air that Stinks all the Time?" --

African American Parents' Views on the Environment and Environmental Education

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Abstract

Twenty-four African American parents from Houston, Texas were interviewed on their perspectives about nature and environmental education. Results showed that animals, plants, and parks played an important part in the lives of these parents and their families. Parents were also aware of the negative affects of environmental problems, such as air pollution, water pollution, and garbage. Parents talked about such problems with their children, acted to help the environment, and believed it was important to live in harmony with nature. Five categories emerged which characterized parents' conceptions of what it means to live in harmony with nature, including living in balance with nature and respecting nature. Parents supported environmental education for their children, and believed it was as important as drug education. Taken as a whole, parents spoke of their commitment to environmental issues and enjoyment of nature while remaining vividly aware of the difficulties which arise from urban poverty.

"Who'd Want to Walk around Smelling Air that Stinks all the Time?" --
African American Parents' Views on the Environment and Environmental Education

African American communities are disproportionately subjected to large amounts of environmental pollution and environmental hazards (Bullard, 1990; Gaylord & Bell, 1995; Wenz, 1995; Westra, 1995). However, little is known about their environmental concerns, understandings, and values (Bullard, 1987; Mohai, 1990).

Some research, particularly from the 1970's, has suggested that economically-impoverished African Americans have little interest in and concern for the natural environment (Hershey & Hill, 1977-78; Hohm, 1976; Kreger, 1973; Mitchell, 1979). Two explanations are typically provided for such findings (see Mohai, 1990, for a review). One explanation, based on Maslow's theory, has been referred to as the "hierarchy of needs" explanation: that people will not have concern about higher-level environmental concerns if their basic needs for food, shelter and physical security are barely met. A second explanation has been referred to as the "subculture" explanation: that distinct qualities of the African American experience -- such as a history of slavery -- have led Blacks to ignore if not oppose nature. In the words of the political activist Eldredge Cleaver: "Blacks learned to hate the land and came to measure their own value according to the number of degrees...away from the soil" (quoted in Kellert, 1996, p. 61).

Yet a recent developmental study by Kahn and Friedman (1995) has led to a different account. In this study, children were interviewed in grades 1, 3, and 5 from a African American community in Houston, Texas on their environmental views and values. Results showed that even given the serious constraints of living in an inner city, children demonstrated a diverse and rich appreciation for nature, and moral responsiveness to its preservation. Children, for example, believed that throwing garbage in their local waterway (a bayou) would harm birds, water, insects, local people, and the view, and that it would matter to them if such harm occurred. In consort with their reasoning, children's moral obligatory judgments were assessed using three criterion judgments: prescriptivity (that the act in question should not be done), rule contingency (even if a rule permits the act), and generalizability

(even if people in a far off location perform the act and think it is all right). Results showed that children conceived of throwing garbage in the bayou as a violation of a moral obligation. In addition, two overarching forms of children's environmental reasoning were found: homocentric and biocentric. Homocentric reasoning focused on protecting nature in order to protect human interests, including considerations based on personal interests, aesthetics, and human welfare (e.g., "air pollution goes by and people get sick, it really bothers me because that could be another person's life"). Biocentric reasoning focused on protecting nature because nature itself has moral standing, including considerations based on intrinsic value, respect, and rights ("animals don't need to be killed either, because they need the same respect that we need").

If this account has merit, then it should find its counterpart with African American urban adults. To investigate this issue, we interviewed parents in the same African American community as in the Kahn and Friedman (1995) study. Four overarching questions were investigated. How do the parents value the importance of nature for their family? What environmental problems are parents concerned about? What types of environmentally-related behaviors do parents participate in with their family? Finally, what are parents' views toward environmental education for their children? The goal was to help characterize and give voice to African American parents' perspectives on nature and environmental education.

Methods

Subjects. Twenty-four parents were recruited through an elementary school in Houston, Texas. Virtually all of the children attending the school were Black (>99%), most received the free lunch program (91%), and the majority were considered low-performing (60%). All of the parents who participated in this study had at least one child enrolled in the school. A "parent" was defined as the child's primary caretaker, which sometimes was the child's grandmother (8%) or other guardian (8%). The principal of the school helped recruit parents by sending a recruitment letter to parents whom he thought might participate. Through informal discussion with the principal, his selection criteria

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included at least one of the following: parents who had shown (a) an interest in helping the school (e.g., as a playground monitor), (b) an interest in helping out in their child's classroom, (c) an involvement in other school activities, (d) a particular interest in their child's education; and/or (e) an interest in environmental issues. Of the 24 parents interviewed (all of whom were Black), 23 were female and 1 was male. Two reasons help explain this disparity. The interviews occurred during school hours (on the school grounds), and fathers were more likely than mothers to be employed during that time. It was also the case that men -- as parents -- resided in a small percentage (23%) of the households who participated. The average household size was between 4 and 5 people.

Procedures and Measures. One of two interviewers (one Black, one White) administered to each parent individually a semi-structured interview that lasted approximately 40 minutes (cf. Damon, 1977; Helwig, 1995; Killen, 1990; Laupa, 1991; Lave, 1988; Nucci & Turiel, 1993; Ogbu, 1977; Piaget, 1929/1960; Saxe, 1990; Smetana, 1995; Wainryb, 1995). The interviews were tape-recorded and later transcribed for analysis.

The interview comprised the following structured questions: (1) Toward understanding how they valued the importance of nature, parents were asked whether animals were important to their family; and, if so, how. Similar questions followed about parents' views and values toward plants and parks/open spaces. Parents were also asked whether they thought it was important for people to live in harmony with nature, and what is meant by harmony. (2) Toward understanding what they perceive as environmental problems, parents were asked whether they were aware of any environmental problems. Then, if parents had not mentioned one or more of the following items, they were specifically asked if they were aware of any problems with air pollution, water pollution, or garbage. Along similar lines, parents were asked whether any environmental problems affected them directly. Potential problems with air pollution, water pollution, and garbage were again investigated, if not spontaneously mentioned. Parents were also asked whether they lean more toward conservation or technology as a general strategy for solving environmental problems ("Some people say there are two ways to solve environmental problems. One way is to decrease our consumer needs and use of technology to control

nature. The other way is to push ahead with developing new technology since it is believed that technology will be able to solve the environmental problems. What do you think? Do you favor one way more than another? Why?"). (3) Toward investigating their environmentally-oriented family practices, parents were asked about whether they ever talked about environmental problems with their family, and, if so, how a typical conversation gets started. Parents were also asked whether they do anything to help the environment, and, if so, what. (4) Toward understanding their views toward environmental education, parents were first asked to rank the importance of drug education on a scale of 1 (least important) to 10 (most important). Then, using the same scale, parents were asked to rank the importance of environmental education. Parents were asked to explain their rankings. Parents were also asked how they would like to see their child's environmental educational curriculum in the school developed ("What kinds of things do you think are important for children to learn about nature? What would you put in the school curriculum? Why?"), and whether they thought it was a good idea to coordinate some school environmental activities with at-home environmental activities.

Coding and Reliability. A coding manual was first developed from the responses of 50% of the data, and then applied to all (100%) of the data. Three types of responses were coded. (1) Dichotomous evaluation responses (e.g., yes/no; aware/not aware of environmental problems); (2) content responses (e.g., animals, plants, garbage, water pollution, and air pollution); and (3) conceptions of living in harmony with nature (e.g., respect for nature). Parts of the coding system drew on coding systems developed by Howe, Kahn, & Friedman (in press) and Kahn & Friedman (1995). Summary descriptions for the harmony conceptions are presented in Table 1.

Insert Table 1 about here

An independent coder trained in the use of the coding manual recoded 6 interviews (25% of the data). Intercoder reliability was assessed through testing Cohen's Kappa for statistical significance at the .05 level. All tests were statistically significant. For evaluations, intercoder agreement was 97%. For

content responses, intercoder agreement was 100%. For harmony conceptions, intercoder agreement was 100%.

Results

The Importance of Nature. Eighty-six percent of the parents said that animals played an important part in the lives of their family. Often, on this topic, parents spoke favorably of pets, such as dogs or cats. It was also not unusual for parents to speak of ways in which their children interacted with a diverse range of smaller animal life close at hand:

> My grandson picks up all kinds of little animal things and some of them, I don't even know what they are myself, but he bring them in and gets a jar. And I'm really afraid of them.

> My kindergarten daughter, she might see something that looks injured and um she saw a worm. She doesn't pick up these black ones or brown ones because they sting. So, this one was a yellow one and she said he was hungry. So, she picked him up and took him over to a leaf and put him on it. You know, they do those type things.

Eighty six percent of the parents also said that plants played an important part in the lives of their family, and 95% said parks and open spaces did. Often parents spoke with enthusiasm of these aspects of nature (e.g., "we're crazy about animals, pets"; "we love plants"; "my children love to run in the park").

Parents spoke of at least two types of problems which made it difficult to interact well with their natural surroundings. One problem involved pollution:

> [Where I live] they have a lot of backup sewage and stuff. And my children can't play in the backyard because it's just nasty. And right now before I left they was over there trying to stop it. It'll be right back. Back up probably next week some time.

A second problem involved social violence:

> Because kids don't have no break around here because all they could do is stay in the house. They couldn't really go outside and sit on the porch, 'cause somebody may shoot 'em or something. 'Cause it was just that bad around here. But now, it's just a little better, 'cause I guess the police had really got on their jobs.

In other words, it is not so much that parents and their children wanted to avoid nature (even in terms of just playing in the backyard or sitting outside), but that the noxious pollution and potential for violence within their community made such experiences difficult.

All of the parents (100%) said that it was important for people to live in harmony with nature. Parents' conceptions of what it means to live in harmony with nature were coded with the categories reported in Table 1. Results showed the following percentages of the total number of conceptions offered (multiple conceptions were coded): Acting upon nature (39%), experiencing nature (18%), being in the right state of mind with nature (13%), being in balance with nature (13%), and respecting nature (16%).

Environmental Problems. All of the parents (100%) were aware of at least some environmental problems, including air pollution (75% of the parents), water pollution (71%), and garbage (67%). Most of the parents (91%) believed that they were directly affected by one or more environmental problems, such as air pollution (54%), garbage (42%), and water pollution (21%). Their knowledge was often direct:

> I'd say about the third week, I have gotten up early in the morning and walk outside and the pollution smell like really bad. Sometimes, I'll tell you what, it seems like sometimes you come by and it smells like a cesspool, but it's really not. You can smell that chemical and where it's coming from, but then you have to go back 'cause sometimes it be real strong... And smells strong, sometimes it smells terrible.

> [The air] stinks, 'cause I laid up in the bed the other night. Kept smelling something, knew it wasn't in my house, 'cause I try to keep everything clean. Went to the window and it almost knocked me out. The scent was coming from outdoors into the inside and I didn't know where it was coming from.... Now, who'd want to walk around smelling that all the time?

> Because a lot of times when the pollution is real bad, it's hard to breathe. And you know you have to breathe to live.

Toward solving environmental problems, 67% of the parents favored conservation over technological solutions, while 33% favored technological solutions over conservation. Here are two examples of each type of solution:

> Nature is natural and with all this high tech we have going on now, it's not really guaranteed. You know what I'm saying? But we can always depend on nature 'cause we come from nature. Nothing takes the place of nature. (Conservation Solution)

> I don't feel we should do the technology because in a sense they always have new ways of doing things and then when they get through with that project there's something else they didn't remember to do. (Conservation Solution)

> Going back to nature, that's not going to get it, is it? I mean, things have changed and you got to change with it. You know, nature's fine, but I think going on with new technology would be

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> the better way. Like when a big oil spill or something happens, you don't have the technology to clean it up and going back to nature, it's just not going to work. (Technological Solution)
>
> [The problems have been going on] so long and it's still going on. So I think they need to come up with some new development and technology. (Technological Solution)

Environmental Practices. The majority of parents (93%) said that they did things to help the environment. Activities included recycling cans and bottles (70%), picking up litter (43%), recycling newspapers (26%), recycling other items (22%), and reusing materials (4%). Some of the parents who recycled cans and bottles did so by giving their recyclables to other people who went from house to house requesting such items. These other people, in turn, took the recyclables to a facility (which was located outside their community) and collected the money. Parents often gave their recyclables away in this manner because they did not own a car and thus lacked the means to recycle the materials themselves. This lack of transportation sometimes affected parents' environmental practices in other ways, as well. For example, when parents said that they did not often go to parks, the reasons sometimes stemmed from not having a car to get to the nicer and safer parks outside their community. Similarly, in terms of parents teaching their children more about nature: "A lot of parents don't take their kids a lot of places where they can understand [things about nature]... because a lot of parents don't have no transportation."

The majority (88%) of the parents had conversations with their children about environmental issues, such as water pollution (18%), garbage (15%), harm to plants (15%), air pollution (12%), harm to animals (9%), recycling (9%), and chemicals in food (3%). These family conversations were started in a variety of ways, based, for example, on observing and interacting with nature directly (47%), TV and movies (47%), school discussions (27%), and newspapers or other media (7%). These conversations were often poignant:

> Yesterday, as my son and I were walking to the store and we were walking down Alabama [street] and for some reason, I think they're getting ready to widen the street. And it's a section of Alabama that I thought was so beautiful because of the trees and they've cut down all the trees. And you know it hurts me every time I walk that way and I hadn't realized that my son had paid attention to it, too. So, he asked me, he said, "Mama, why are these, why have they cut down all the trees?" And then he asked me, "Well, if they cut down all the trees everywhere, would that have an affect on how we breathe?"

> The water we drink just comes out of the faucet and sometimes he'll say something like "this water doesn't look right." You know, it could have something in it that could be detrimental to us. [My son asks] "could it hurt me? How do we know what's in this water?" And to some of his questions I have no answer because I mean, I cannot tell him what's in the water 'cause I don't know. I wonder some things myself.

Such conversations point to an appreciation for nature (of trees), environmental concerns which arise through direct experience of environmental degradation (the cutting of trees and water pollution), and perhaps some sense of powerlessness in not being able to preserve what exists of their community's natural beauty and in not knowing about their environment's safety.

Environmental Education. On a scale of 1-10 (with 1 the least important and 10 the most important), parents ranked the importance of drug education for their children. Results showed a mean rank of 8.5 (SD 3.3). On the same scale, parents ranked the importance of environmental education for their children. Results showed a mean rank of 8.7 (SD 2.4). Matched-pair t-tests showed no statistical difference between parents' rankings for the importance of drug education versus environmental education. In comparison to environmental education, 57% of the parents ranked drug education as equally important, 29% as more important, and 14% as less important. Of parents who equated the importance of drug and environmental education, their reasoning often focused on the physical ramifications of both problems:

> With the drugs, we're nothing. Without the environment, we're nothing. And drugs is something I see every day. There are dealers across the street from me. So, I see this every day and it's just killing us. I mean, it really is killing us and with the drugs, we're not going to have any youth...With the drugs, you're not going to have a future and without any environment we're not going to have a future.

> Well let's put it like this here. If you don't take care of one [drugs], it's going to kill you. If you don't take care of the other [the environment] it's going to kill you.

Parents were also asked what they thought would be important for their children to learn about nature and to include in their children's school curriculum. Based on the total number of responses (multiple responses were coded), parents suggested a focus on littering/garbage (16%), air pollution (14%), spiritual aspects of nature (12%), plants (12%), animals (12%), water pollution (6%), drugs and human violence (4%), technology (4%), recycling (4%), and nature walks (4%). All of the parents (100%) favored environmental education that coordinated school curriculum with at-home activities.

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Discussion

The African American communities in Houston have remained -- in the words of Robert Bullard (1987) -- largely invisible to politicians, researchers, and environmentalists alike, locally (in Houston) and nationally. Thus, through interviews with parents, this study helps to make visible one African American community's perspective on nature and environmental education.

It is true that the parents we interviewed often described the harsh realities of their urban social environment, from drug dealers living next door to drive by shootings. But counter to both the "hierarchy of needs" and "subculture" explanation defined earlier, the results from this study suggest that these experiences cannot easily quell parents' environmental awareness, commitments, and sensibilities. The results showed, for example, that animals, plants, and parks played an important part in the lives of these parents and their families. Parents were also aware of the negative affects of environmental problems, such as air pollution, water pollution, and garbage. Their knowledge was often direct, visceral: the air would often "smell like a cesspool," and sewage would often back up and be "just nasty." Parents talked about such issues with their children. Parents also acted to help the environment, often in terms of recycling. In terms of parents' conceptions of living in harmony with nature, more than one quarter of their conceptions focused either on being in balance with nature or on respecting nature. Such orientations are often characterized in the environmental ethics literature as being biocentric, wherein nature itself is given moral standing (Callicott, 1985; Leopold, 1970; Rolston, 1989) -- an orientation often attributed to tree huggers, backpackers, and white, upper middle class environmentalists; rarely to economically impoverished African Americans.

Research has shown that if education is to succeed better in African American communities, it will likely depend in part on support from the home (Ogbu, 1977, 1993; "Parental Role," 1994; Solomon, 1992; Winters, 1993). Three results suggest that such support for environmental education exists. First, parents highly ranked the importance of environmental education (8.7 on the 10 point scale). Second, there was no statistical difference in parents' ranking of the importance of drug education and environmental education. As one parent said: "With the drugs, you're not going to have a future and

without any environment we're not going to have a future." Third, all of the parents favored environmental education that coordinated school curriculum with at-home activities.

Environmental educators often believe that children need to experience pristine natural settings to develop environmental sensibilities (Chawla, 1988; Nabhan & Trimble, 1994; Orr, 1992, 1994). Accordingly, educators have questioned whether environmental education can occur effectively in the inner cities, especially when parents (as in the current study) lack the economic means for their families to visit natural settings outside of their own community. It is a difficult issue, and we do not want to downplay the importance in children's development of experiencing pristine areas. Yet our results suggest that urban educators can draw on other worthwhile approaches, as well. One, of course, involves helping students to understand and improve the environmental conditions which directly harm their wellbeing. For example, Bullard (1987) reports, and our research confirms, that three overriding environmental problems in Houston include air pollution, water pollution, and solid waste. In addition, since parents sometimes spoke of living in balance with nature and respecting nature, it may well be possible to bring such considerations to the traditional curriculum. For example, one third-grade teacher at the children's school chose literature (such as Shel Silverstein's, 1964, The Giving Tree) to read to his students to help foster an empathy for the natural world. Equally important, our qualitative results highlight instances where these children -- perhaps like all children (Kellert, 1996; Wilson, 1984) -- were fascinated with the animals and vegetation within their reach: butterflies, ants, trees, worms, spiders, leaves, and flowers. Thus our results suggest that nature in its splendor can be found everywhere, and that urban educators can look not only far off but close at hand for experiences from which to develop curriculum.

One methodological qualification is warranted. The principal of the school had objected to our proposal to solicit parents broadly from the school population to participate in this study. He thought, for example, that letters of solicitation sent home with all of the students of a handful of classrooms would be too burdensome on parents, and largely ineffective anyway. Thus the principal targeted certain parents to recruit. From our informal discussions with the principal, it appeared that he

(reasonably) chose to solicit parents that had been somewhat active in the school or in their child's education, or broadly interested in environmental issues. It is unclear how much this "principal-solicited" population of parents would have differed from a "self-selected" population, given that many parents may well have used the same criteria to select themselves for this study. But it is possible that our results represent a higher bound in terms of this community's environmental awareness, commitment, and sensibilities.

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Table 2

Parents' Conceptions for Living in Harmony with Nature -- Summary of Categories

Acting Upon	Conception based on doing something to or for nature, including positive acts ("to live in harmony with nature means to help the environment"; "[harmony means] planting more trees"; and negative acts ("not polluting the air"; "don't be shooting at the birds").
Experiencing	Conception based on experiencing or interacting with nature ("[harmony means] being out in nature"; "just going to a river or lake or something and just sitting there, absorbing all of the fresh air, the outside"; "pay closer attention to when the grass is greener, when the leaves fall").
State of Mind	Conception based on experiencing a particular state of mind or feeling ("[harmony means] to enjoy the outside"; "to live happily together as one big happy family").
Balance with Nature	Conception based on being in balance with nature ("[harmony means] you're balanced out with nature, to where you're not working against it, like we can't exist without plants and without us, they can't exist"; "working together, because everybody [including a person, ant, or mouse] has a job to do or a place").
Respect for Nature	Conception based on respecting nature, including such concepts based on reciprocity ("[harmony means] I'm going to respect the bee, if he respects me") and perspective taking ("to put themselves in the animals' shoes, could they live in that environment with all the air pollution living outdoors").